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APPLICATION NO.	F	LDICDATE	EIRCT MAMED INVENTOR	ATTORNEY DOCKET NO	CONFIDADATIONA	
APPLICATION NO.	_   F1	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/503,140	02/11/2000		Tsuneo Hayashi	SONY-T0130	6142	
33448	7590	06/20/2006		EXAMINER		
ROBERT	J. DEPKE		TORRES, JOSEPH D			
LEWIS T. S	STEADMA	N				
ROCKEY,	DEPKE, L'	YONS AND KITZII	ART UNIT	PAPER NUMBER		
SUITE 545	O SEARS T	OWER	2133			
CHICAGO.	IL 6060	6-6306				

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Summer	09/503,140	HAYASHI ET AL.					
Office Action Summary	Examiner	Art Unit					
	Joseph D. Torres	2133					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  18(a). In no event, however, may a reply be tin  18(a) in no event, however, may a reply be tin  18(b) MONTHS from  18(c) cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 29 Ap	oril 2006						
		·					
·=	<b>,—</b>						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
dosed in decordance with the produce under E	x parte quayre, 1900 C.D. 11, 40	0.0.213.					
Disposition of Claims							
4)⊠ Claim(s) <u>1-3,5-7,19,20 and 28-35</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-3,5-7,19,20 and 28-35</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or	election requirement.	•					
	•						
Application Papers							
9) The specification is objected to by the Examiner.							
10)⊠ The drawing(s) filed on <u>20 May 2003</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> </ul>		)-(d) or (f).					
2. Certified copies of the priority documents have been received in Application No.							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
oso the attached detailed Office action for a list of the certified copies flot received.							
Attachment(s)	_						
) Notice of References Cited (PTO-892).  Discrete Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary						
(PTO-948)  Discrete of Draftsperson's Patent Drawing Review (PTO-948)  Discrete of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da 5) Notice of Informal P	ate atent Application (PTO-152)					
Paper No(s)/Mail Date	6) Other:	, , , , , , , , , , , , , , , , , , , ,					
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#### **DETAILED ACTION**

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# Response to Arguments

1. Applicant's arguments filed 04/29/2006 have been fully considered but they are not persuasive.

The Applicant contends, "In response to the Examiner's final office action Applicants have modified the independent claims to clarify the invention and distinguish the claimed invention from the prior art of record. More specifically, Applicants have modified the independent claims to further include the requirement that the control operation perform adjusting of a parameter signal determined by calculation of an amount of error rate variation, the parameter signal adjustment being based upon a difference from an optimal value and error rate calculations periodically made above and below the optimum value".

The Examiner disagrees and asserts that claims 1, 19, 20 and 34 explicitly recite, "wherein the control means performs a control operation so as to determine a parameter that makes an error rate smaller before or during playback of the recording medium, **Or** if a condition of playback deteriorates, the control operation <u>adjusting a parameter signal determined by calculation of an amount of error rate variation the parameter signal adjustment being based upon a difference from an optimal value and error rate calculations periodically made above and below the optimum value" [Emphasis Added]. The term or is a function word used to indicate an alternative,</u>

hence; everything after the "or" term is optional as long as long as all of the elements of the limitations prior to the "or" term hold. That is, the Applicant has not added a single limitation to the claim that was not in the claim before the amendment and has only provided an optional alternative limitation to the limitations that are already in the claim.

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In addition even if the Applicant were to amend claims 1, 19, 20 and 34 to replace the "or" term with "and", newly amended claim 1 still recites, "error rate calculations periodically made above and below the optimum value", which is incomprehensible. The Examiner is assuming that the Applicant intends something to the effect of: --error rate calculations periodically made and checked against the optimum value--. However, the Examiners position is mute since the entire limitation after the "or" term is optional.

The Examiner disagrees with the applicant and maintains all previous rejections of claims 1-3, 5-7, 19, 20 and 28-35. All amendments and arguments by the applicant have been considered. It is the Examiner's conclusion that claims 1-3, 5-7, 19, 20 and 28-35 are not patentably distinct or non-obvious over the prior art of record in view of the references, Hayashi, Yasuhiro et al. (US 5784356 A, hereafter referred to as Hayashi), Bullock; Dean C. et al. (US 5764651 A, hereafter referred to as Bullock) and Takamine, Kouichi et al. (US 6240055 B1, hereafter referred to as Takamine) in view of in view of Lee, Woo-Nyun et al. (US 5930448 A, hereafter referred to as Lee) as applied in the last office action, filed 05/26/2005. Therefore, the rejection is maintained.

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## Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 1. Claims 1, 19, 20 and 28-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi, Yasuhiro et al. (US 5784356 A, hereafter referred to as Hayashi) in view of Bullock; Dean C. et al. (US 5764651 A, hereafter referred to as Bullock).

35 U.S.C. 103(a) rejection of claims 1, 19, 20 and 28-33.

See the Non-Final Action filed 05/26/2005 for detailed action of prior rejections.

35 U.S.C. 103(a) rejection of claims 34 and 35.

Claim 34 has all the limitation of claim 1 and claim 25 contains limitations of previously examined claim 1.

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See the Non-Final Action filed 05/26/2005 for detailed action of prior rejections.

2. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi, Yasuhiro et al. (US 5784356 A, hereafter referred to as Hayashi) and Bullock; Dean C. et al. (US 5764651 A, hereafter referred to as Bullock) in view of Takamine, Kouichi et al. (US 6240055 B1, hereafter referred to as Takamine).

See the Non-Final Action filed 05/26/2005 for detailed action of prior rejections.

3. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi, Yasuhiro et al. (US 5784356 A, hereafter referred to as Hayashi), Bullock; Dean C. et al. (US 5764651 A, hereafter referred to as Bullock) and Takamine, Kouichi et al. (US 6240055 B1, hereafter referred to as Takamine) in view of in view of Lee, Woo-Nyun et al. (US 5930448 A, hereafter referred to as Lee).

See the Non-Final Action filed 05/26/2005 for detailed action of prior rejections.

### Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure many of which can be used in a prior art rejection of the current claims. In particular, Christensen teaches an error correcting means for correcting errors in said read data (col. 7, lines 55-64 in Christensen); an error rate calculating means for calculating an error rate of said errors in said read data (col. 8, lines 11-14 in Christensen); and a control means for dynamically controlling and adjusting reading

conditions (Microprocessor 25 in Fig. 3 of Christensen); wherein the control means performs a control operation so as to determine a parameter that makes an error rate smaller before or during playback of the recording medium, or if a condition of playback deteriorates, the control operation adjusting a parameter signal determined by calculation of an amount of error rate variation the parameter signal adjustment being based upon a difference from an optimal value and error rate calculations periodically made and checked against the optimum value (Abstract in Christensen).

This is a RCE of applicant's earlier Application. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (571) 272-3829. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joseph D. Torres, PhD Primary Examiner Art Unit 2133

PRIMARY EXAMINES